

Notes on some palearctic *Stilicus* species
with special reference to Turkey
(Col. Staphylinidae, Paederinae)
26th contribution to the knowledge
of Staphylinidae

by

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With 10 figures

ABSTRACT

New data and observations on palearctic *Stilicus* species are presented, including the first description of the male of *S. gaditanus* Peyer, and the descriptions of *S. prolongatus khalash* n. ssp. and *S. rufipes tauricus* n. ssp. The synonymy of *S. emodensis* Coiff. with *S. caporiaccoi* Bnh. is proposed. Six taxa are recorded for the first time from Turkey, and one taxon each as new to Morocco, Israel, Iran and China.

Having recently been invited to review the palearctic *Stilicus* material, amounting to about a thousand specimens, in the collection of the Geneva museum, I was able to determine a number of new taxa and data. Most of the new taxa belong to Nepalese species of the subgenus *Tetragnathostilicus* Scheerpeltz, and will be described separately as a supplement to a paper (Rougemont, 1987, *Nouv. Rev. Ent.*) already devoted to that group. In the present paper I present the new data concerning the West Palearctic species.

I thank my friend I. Löbl for the opportunity of studying this material, and for allowing me to retain duplicates of some species in my reference collection.

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S. dilutipes Reitt.

S. dilutipes is phylogenetically close to *S. rufipes* Germ. and *S. arabs* Saulcy, being the representative taxon of this group in the southern Balkans. It was described from the Peloponnese, but also cited by Scheerpeltz from Epirus, whence the Geneva museum also possesses a long series (Tristanon, Konitsa etc.) together with exx. from Thessaly (Oros mountains).

S. dilutipes is separated from *S. rufipes* and *S. arabs* in Coiffait's key to the pale-arctic species on the basis of the midlongitudinal impunctate band on the pronotum, which he describes as entire, reaching or almost reaching the anterior border, but I have found this character variable in the series of each species which I have examined. *S. dilutipes* is more easily separated from the other two species by its coarser and more confluent sculpture of the head and pronotum, and by the pale legs which are clearly infuscate at the knees, in the manner of *S. geniculatus* Epp.

S. ibericus Fagel

This species appears to be extremely localised, perhaps endemic to the Sierra de Guadalupe, since it is only represented among the plentiful material from many localities in Spain in the Geneva museum by a series from the Type locality; Guadalupe, Caceres, 18.VIII.1969, A. Comellini.

Figures of the aedeagus of two specimens from this series show how slightly different positions of the flexible dorsal part of the ventral plate may alter its appearance, allowing Coiffait's description of this as being 'harpoon shaped' in ventral view. Figure 2 which shows the apico-lateral edges of the ventral plate in a more upright position resembles Coiffait's figure of the aedeagus of *S. antoinei* Peyer., described from the Atlas mountains, more closely than it does his figure of that of *S. ibericus*.

S. gaditanus Peyer

This species was only known by the unique female Type from Algeciras. Two males among the Geneva material, including one from Ceuta on the other side of the Straits of Gibraltar, enable me to describe the male characters:

Abdominal sternites III-VI unmodified; sternite VII broadly and very shallowly concave on posterior border; sternite VIII with a deep ogival emargination extending one third of the length of sternite. Aedeagus: Fig. 5; the basal plate is V-shaped in section like that of *S. ibericus*, and of characteristic profile; the most remarkable feature lies in the development of the lateral lobes, which are produced anteriorly in an acute tip which reaches the apex of the median lobe.

S. capitalis Gem. & Har.

I found a single male of this species, which was described from Soviet Khirgistan, at Urumqi, Xinjiang Province. It is new to China.

S. caporiaccoi Bnh.

Stilicus caporiaccoi Bernhauer 1934, Atti Mus. Civ. Stor. Nat. Trieste XII: 87.

Stilicus emodensis Coiffait 1982, Senckenbergiana Biol. 62: 100. NEW SYNONYMY.

Thanks to the kindness of Dr. C. Leonardi of the Milan museum I have been able to examine the Type of this species, and find, as I had suspected, that it is conspecific with *S. emodensis* Coiffait.

The Type was collected at Chokpiong in the Braldo Valley by members of the 1929 Italian Karakorum Expedition, and Coiffait's material from Kargil in Ladakh, where I found 3 exx., and another at Saspul in June 1981. My colleagues of the Geneva museum collected a further 23 exx. in the Chitral area (Lotkoh 2350 m, Madaglasht 2700 m, Bum-buret 2200-2350 m) in June 1983. The species' habitus, the elaborate modification the male seventh sternite, and the general conformation of the aedeagus shows that it is close to *S. capitalis*.

S. prolongatus Solsky

This remarkable species belongs to the subgenus *Tetragnathostilicus* Scheerp. and should properly have been included in the key which I gave to that group (1987). The omission is however of little consequence, for the species is so aberrant in facies and sculpture that it cannot be confused with any other. Unlike other members of the group, in which the elytral puncturation is either simple, with deep round punctures separated by narrow shiny interstices, or confused, the punctures shallow and obscured by rugosities of the surface, *S. prolongatus* has very sparse minute asperate punctures on an even, shiny elytral surface.

Cl. Besuchet and I. Löbl collected a series of 9 exx. in North Pakistan (Chitral, s/Madaglasht, 27.V.1983, 2900-3050 m) of this species which was hitherto only known from Soviet Uzbekistan and Tadzhikistan. The Pakistani specimens represent a new geographical subspecies for which I propose the name *khalash* nov. Compared with exx. from Baldzhan in Tadzhikistan (in BMNH), the new subspecies has a slightly less elongate head (ratio: 5: 4-5: 3.8), and the shape of the ventral plate of the aedeagus is characteristic (see Figures 6 & 7). The Holotype and six Paratypes are in the Geneva museum; 2 Paratypes in my collection.

S. orbiculatus Payk.

This, the commonest and most widely distributed European species of *Stilicus*, is well represented in the Geneva museum collection, including specimens from Israel (Golan, Baniyas, 2.VI.1973, Löbl; Golan, Mahjar 200 m, 27.IV.1982, Besuchet, Löbl) whence it had not, to my knowledge, been previously recorded.

Series from Israel, Cyprus and Spain (Guipuzcoa: Orío) in the museum's collection include individuals having a strong blue or purple reflex on the elytra. It is remarkable that none of the many entomologists who have dealt with this species in the 160 years since it was described have recorded the phenomenon, which I had not previously encountered within the genus except in several recently collected undescribed (*Tetragnathostilicus*) species from the Himalaya*.

S. erichsoni Fv.

Specimens from several localities in the Iberian Peninsula (Guarda Prov., Caceres Prov.) collected for the Geneva museum were found, like the individuals of *S. orbiculatus* discussed above, to have a greenish, blue or purple reflex on the elytra.

S. korbi Fv.

S. korbi was described from Lenkoran in Soviet Azerbaidjan. A male in the Geneva museum collection taken in Mazanderan, Keyasar, 36°22'N 53°16'E on 22.VII.1973 by A. Senglet extends the species' range to the Elburz mountains of Iran.

S. geniculatus Er.

This species has hitherto been considered uncommon throughout its fairly extensive range. A long series from many localities (Sevilla, Badajoz, Salamanca, Ciudad Real, Caceres, Avila Provinces in Spain and Beja in Portugal) collected in recent years for the Geneva museum suggests that it is common in the Iberian Peninsula.

THE STILICUS OF TURKEY

Since to my knowledge no single species of *Stilicus* has so far been recorded from this country, which is of particular zoogeographical interest, I list below all the material obtained by Cl. Besuchet and I. Löbl.

S. angustatus Fourc.

Samsun, Samsun-Kuvac, 20.V.1967, Cl. Besuchet: 1♂.

The head of this ex. is somewhat more elongate than that of typical exx. from western Europe, in this respect intermediate between those and a female from Iran (Heran, 2000 m, P. Morvan leg., in coll. Rougemont) which I have tentatively determined as *S. iranicus* Coiff., a species of which the male is unknown. While the taxonomic status of the Iranian exx. must remain uncertain, the male sexual characters of the Turkish ex. show unquestionably that it belongs to *S. angustatus*.

S. similis Er.

Konya, Sentavul Grigidi 1500-1600 m, 18.IV.1978, Besuchet-Löbl: 1♂.

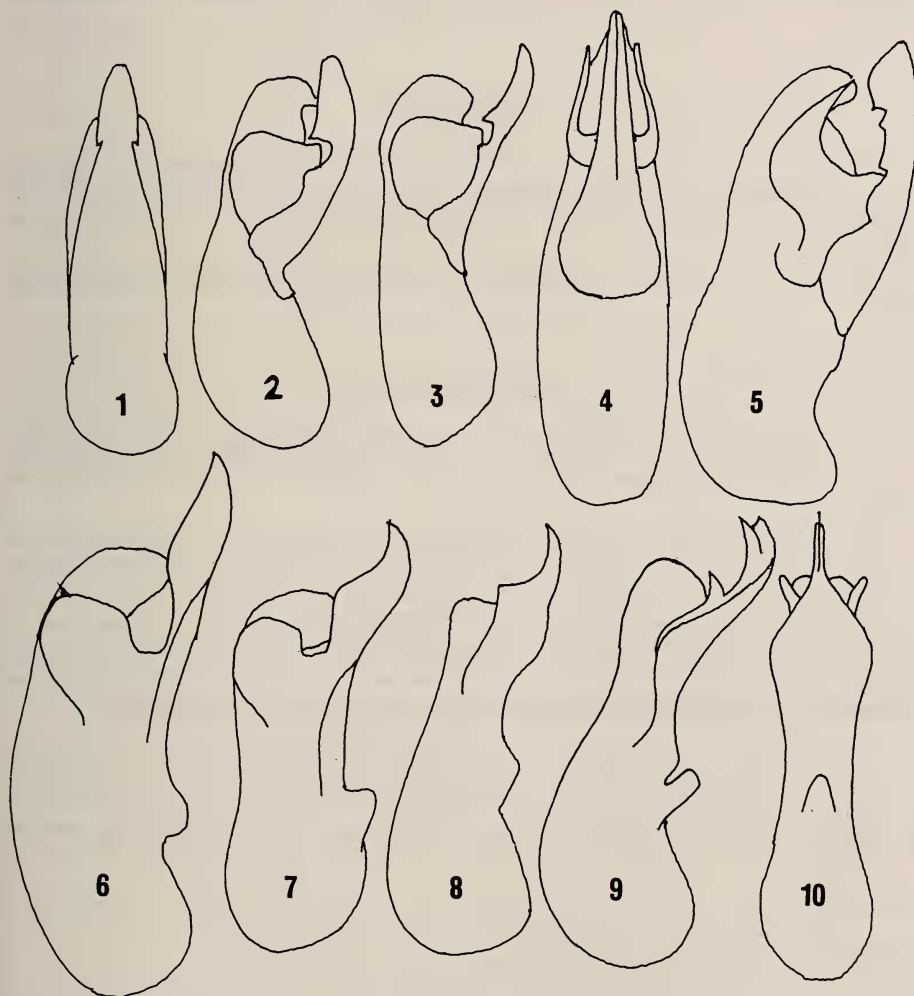
* In a recent article (Revision of the genus *Stiliderus*, Part 2) I suggested that the coloured metallic reflex is subject to long term post-mortem alteration, for the unique Type of a species described fifty eight years ago by Bernhauer as possessing a strong metallic reflex on the whole body was found by me to be a uniform deep black, with only faint traces of a blue reflex on depressed parts of the head.

S. orbiculatus Payk.

Istambul, Halkali, 3.VII.1969, Cl. Besuchet: 1♂ & 3♀♀; Izmir, Bergama, 17.VII.1969, Besuchet; 1♀.

S. arabs Saulcy

Tokat, env. de Turhal, 21.V.1967, Cl. Besuchet: 1♂; Tokat, Tokat-Almus, 21.V.1967, Cl. Besuchet: 4♀♀.



Outlines of aedeagi in ventral (1, 10) and lateral (2-9) views. 1,2: *Stilicis ibericus* Fag.; 3: *S. ibericus* Fag., ex. with dorso-lateral edges of basal blade more obtusely angled; 4,5: *S. gaditanus* Peyer. from Ceuta; 6: *S. prolongatus* Solsky from Baldshan; 7: *S. prolongatus khalash* n. ssp.; 8: *S. arabs* Saulcy; 9,10: *S. rufipes tauricus* n. ssp.

This species was known only from the Lebanon and Israel, whence the Geneva museum also possesses material: Lebanon: Cedres Baroak 1800 m, 31.III.1973, Besuchet; Israel: Golan, Baniyas, 24.IV.1982, Besuchet-Löbl. It's occurrence in the quite different biotope of northern Anatolia is therefore unexpected.

The Turkish exx. are considerably more robust than levantine exx., removing them even further in proportions from *S. rufipes* and closer to the new sub-species described below, from which they can only be distinguished by the male characters. In addition to the characters of the aedeagus, *S. arabs* is distinguished from both *S. rufipes* and the new sub-species by the conformation of the male abdominal sternite VII, which is sharply produced in the middle of the posterior border, whereas it is shallowly concave in the other two taxa.

S. rufipes Germ.

Istambul, Forêt de Taçdelen, Istambul-Sile, 28.V.1967, Cl. Besuchet: 1 ♀; Istambul, Forêt de Belgrade, 10.VII.1969, Besuchet: 2 ♀ ♀; Kirklareli, Yeniceköy-Demirköy, 31.VII.1969, Cl. Besuchet: 1 ♂ & 2 ♀ ♀; Omerler près Bolu 800 m, 21.V.1976, Besuchet-Löbl: 1 ♀.

These exx. belong to the nominate form of this common and widespread European species.

S. rufipes tauricus n. ssp.

♂ Holotype and 2 ♀ ♀ Paratypes: Konya, 15 km SO Beysehir 1200 m, 7.V.1978, Besuchet-Löbl. (Holotype and 1 Paratype in Mus. Geneva; 1 Paratype in coll. Rougemont).

This new taxon may be succinctly described as having the facies and sculpture of *S. rufipes* Germ. and of *S. arabs* Saulcy, the aedeagus almost identical to that of *S. rufipes* ssp. *rosii* Zan. (endemic in S. Italy), and the proportions of the Turkish race of *S. arabs*. The conformation of the male seventh sternite is that of *S. rufipes*, not of *S. arabs*. As no significant diagnostic differences were found in the measurements of appendages or in other parts to separate the three taxa, I will limit the description to the short table of comparative measurements below, and figures of the aedeagus.

	LH	BH	LP	BP	LE	BE	RE
<i>S. rufipes</i> ♂ Kirklareli	88	95	86	77	104	98	6
<i>S. arabs</i> ♂ Lebanon	86	92	82	76	105	104	1
<i>S. arabs</i> ♀ Turkey	90	99	87	84	112	110	2
<i>S. r. tauricus</i> ♂ Holotype	94	100	95	86	118	117	1
<i>S. r. tauricus</i> ♀ Paratype	96	101	95	88	119	117	2

(LH: length of head; BH: breadth of head; LP: length of pronotum; BP: breadth of pronotum; LE: length of elytron; BE: breadth of elytra; RE: ratio of elytral length/breadth).

Apart from the well defined primary and secondary sexual characters, *S. rufipes rufipes* and its only other subspecies, *S. rufipes rossii* can only be separated from *S. arabs* by the proportions of the elytra, distinctly elongate in *S. rufipes*, almost quadrate in *S. arabs*. It will be seen from the table given above that by this criterion, the new taxon answers the description of *S. arabs*, but that it surpasses any of the forms of either species in its robust build.

Eschewing an otiose disquisition on the subject, I will state simply that in assessing the phylogeny of this new taxon I have discounted the possibilities that

- a. The new taxon is a hybrid
- b. That *S. rufipes* and *S. arabs* should be regarded as conspecific, and that *tauricus* represents an intermediate form at the junction of the distributional ranges
- c. (In regard to the similarity of the aedeagus) that *S. rufipes rossii* and *S. rufipes tauricus* are monophyletic.

Instead, I consider that populations of *S. rufipes* at two separate points (S. Italy, S. Anatolia) on the southern limits of its range underwent parallel changes in the shape of the apex of the ventral blade of the aedeagus. The Anatolian population in addition responded to the same local factors which caused the Anatolian race of *S. arabs* to increase body size, producing this apparent convergent evolution.

This view reflects the pattern of subspeciation of other genera of Staphylinidae in which widespread European species are represented by distinct geographical races in Italy and in Turkey (See Puthz, 1980, Reichenbachia 18,1 re *Dianous coeruleus* Gyll., and 1985, Boll. Mus. civ. Stor. nat. Verona 12: 419-429 regarding *Stenus comma* Lec., *Stenus intricatus* Er. and their subspecies).

RÉSUMÉ

L'examen de la totalité des *Stilicus* paléarctiques de la collection du Musée de Genève, soit environ un millier d'exemplaires, permet à l'auteur de présenter quelques données nouvelles sur ces insectes, notamment la description du mâle de *S. gaditanus* Peyer. et de deux taxons nouveaux: *S. prolongatus khalash* n. ssp. et *S. rufipes tauricus* n. ssp. Six espèces sont signalées pour la première fois de Turquie, ainsi qu'une espèce chacune du Maroc, d'Israël, d'Iran et de la Chine.

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